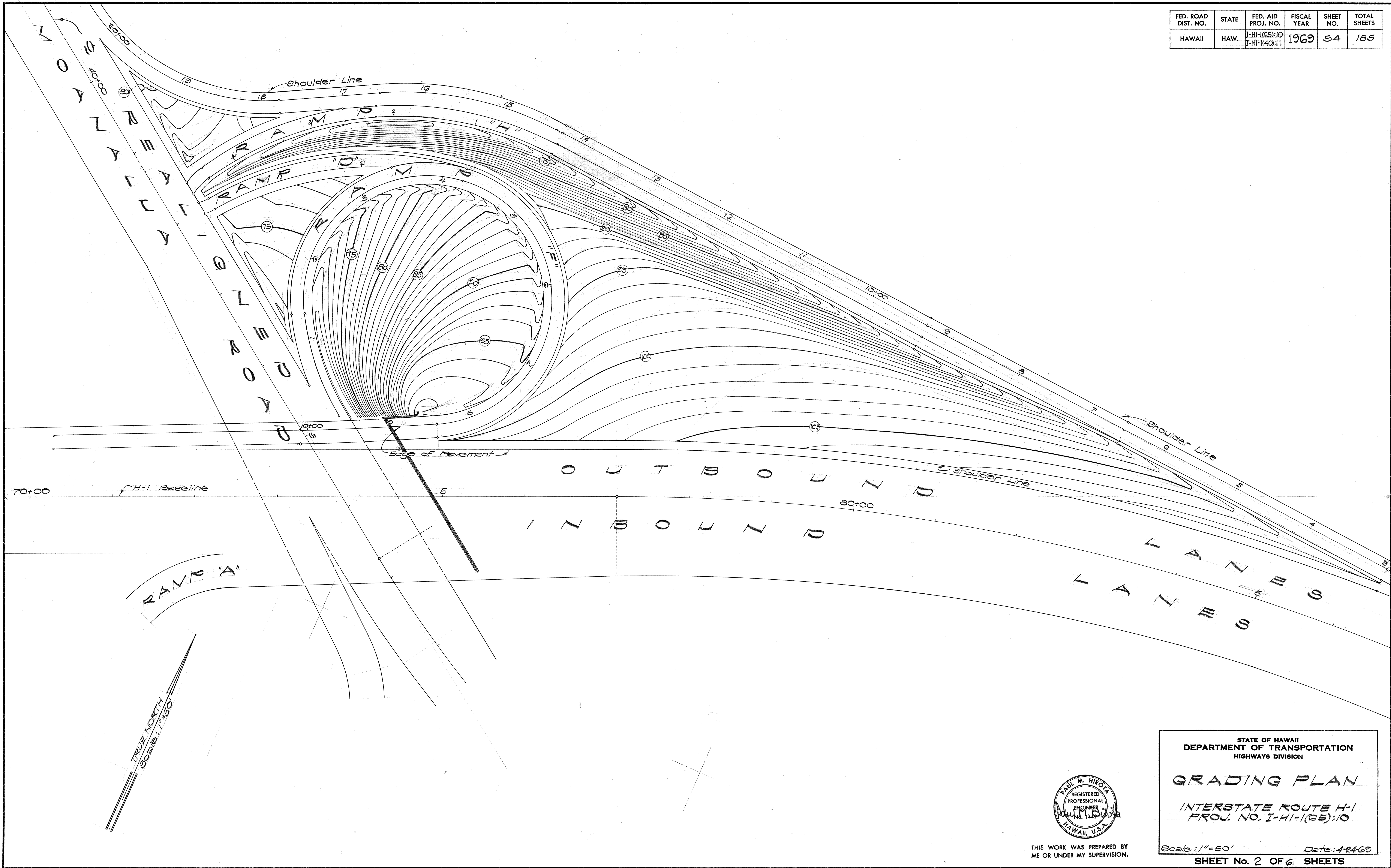
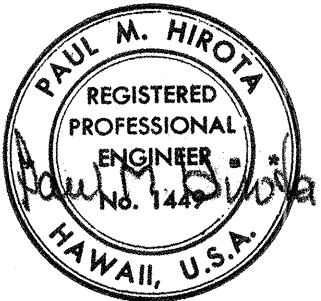


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(65):10 I-HI-1(40):11	1969	54	185



SURVEY PLATTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	



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DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GRADING PLAN
INTERSTATE ROUTE H-1
PROJ. NO. I-HI-1(65):10

Scale: 1" = 50'
Date: 4-24-69

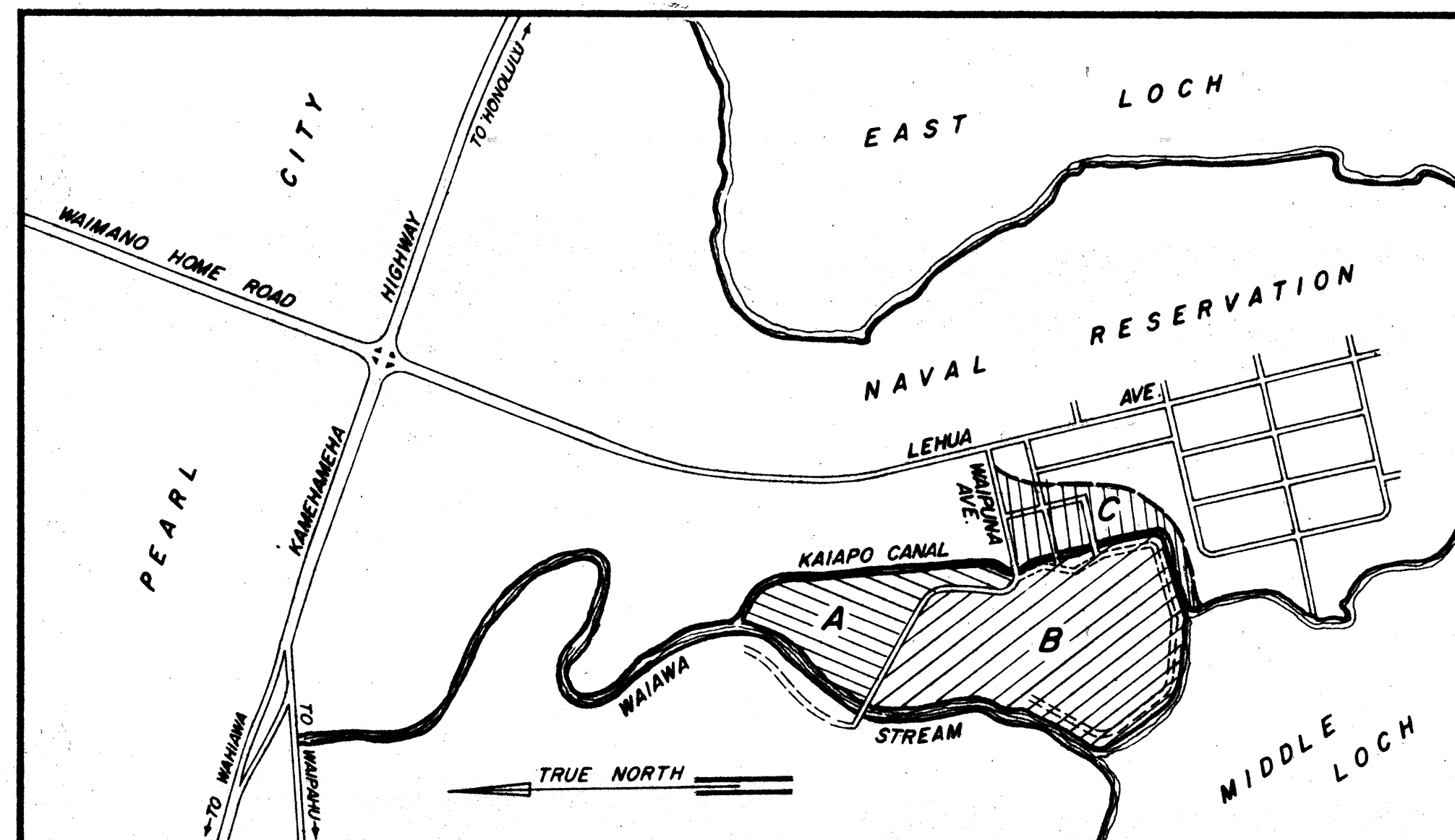
SHEET No. 2 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(65)-10 I-HI-1(40)-11	1969	55	185

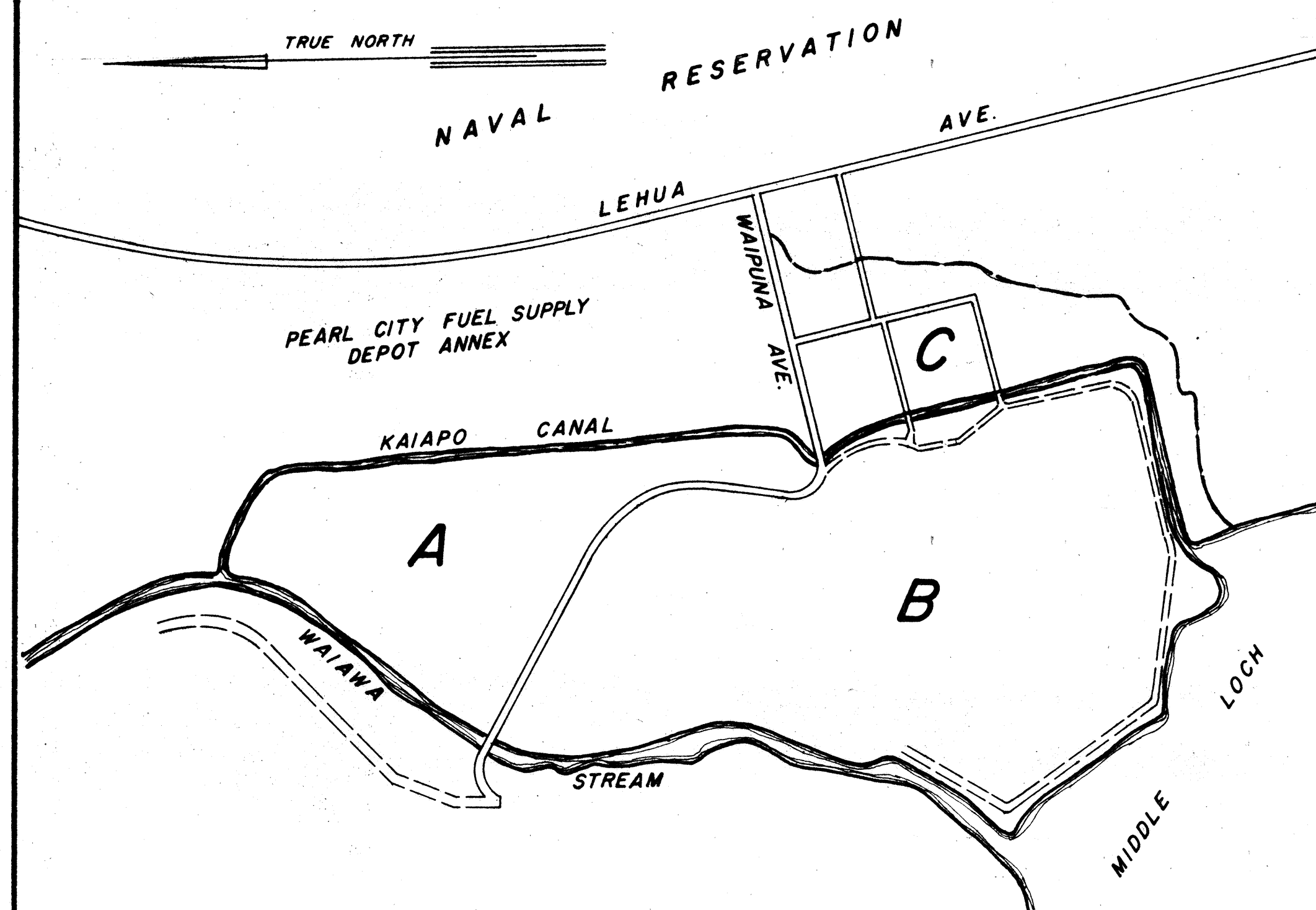
Revised: July 30, 1969

NOTES:

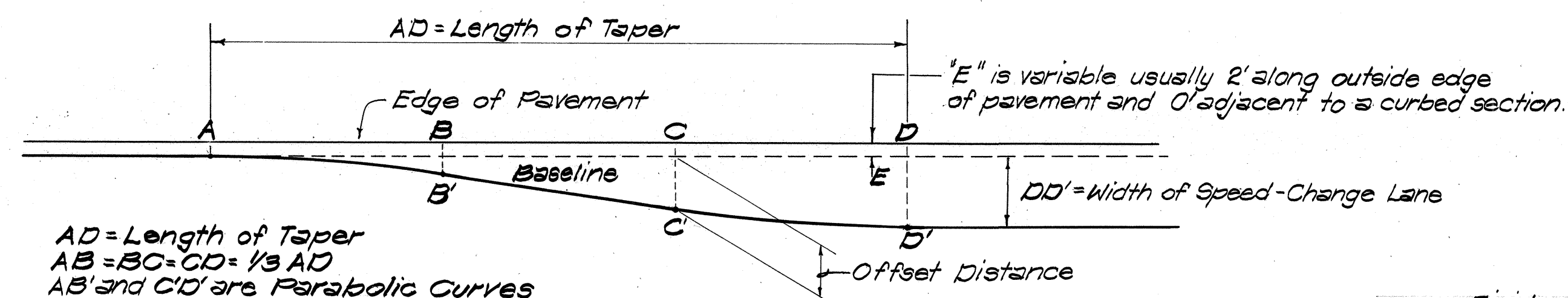
1. The material shall be deposited in Area "C". The fill shall be constructed to approximate elevation +12 in accordance with the requirements of Section 18 Embankment, and compacted to a relative compaction of 90 percent. The finished surface shall be graded smooth. The fill shall be started at Waipuna Avenue and continue Southward. If more material is available than is required to fill Area "C", the excess material shall be deposited across Kaiapo Canal in Area "B" adjacent to Area "C". The edge of the fill, where adjacent to waterways, shall be built with granular material and the fill slope shall be 3:1.
2. The Contractor's hauling equipment and loads shall conform to the State of Hawaii's vehicle weight and loading limitations.
3. The State has obtained from the Navy a permit to enter Navy property for the purpose of depositing material at the disposal site. The Contractor shall contact the Engineer to determine the conditions under which the permit is granted.
4. During construction of the embankment, the Contractor shall apply water to abate dust nuisance as specified in SECTION 23-SPRINKLING of the Special Provisions.
5. The areas shown have been designated as the disposal site of other highway projects currently under construction. The Contractor's attention is, therefore, directed to the provisions of SECTION 7.11, COOPERATION BETWEEN CONTRACTORS of the Special Provisions. The Engineer further reserves the right to limit the disposal of material under this contract to specific sections of the areas shown.



LOCATION MAP
SCALE: 1" = 1000'



SITE PLAN
PEARL CITY PENINSULA DISPOSAL SITE
SCALE: 1" = 400'



PLAN
Scale: 1" = 20'

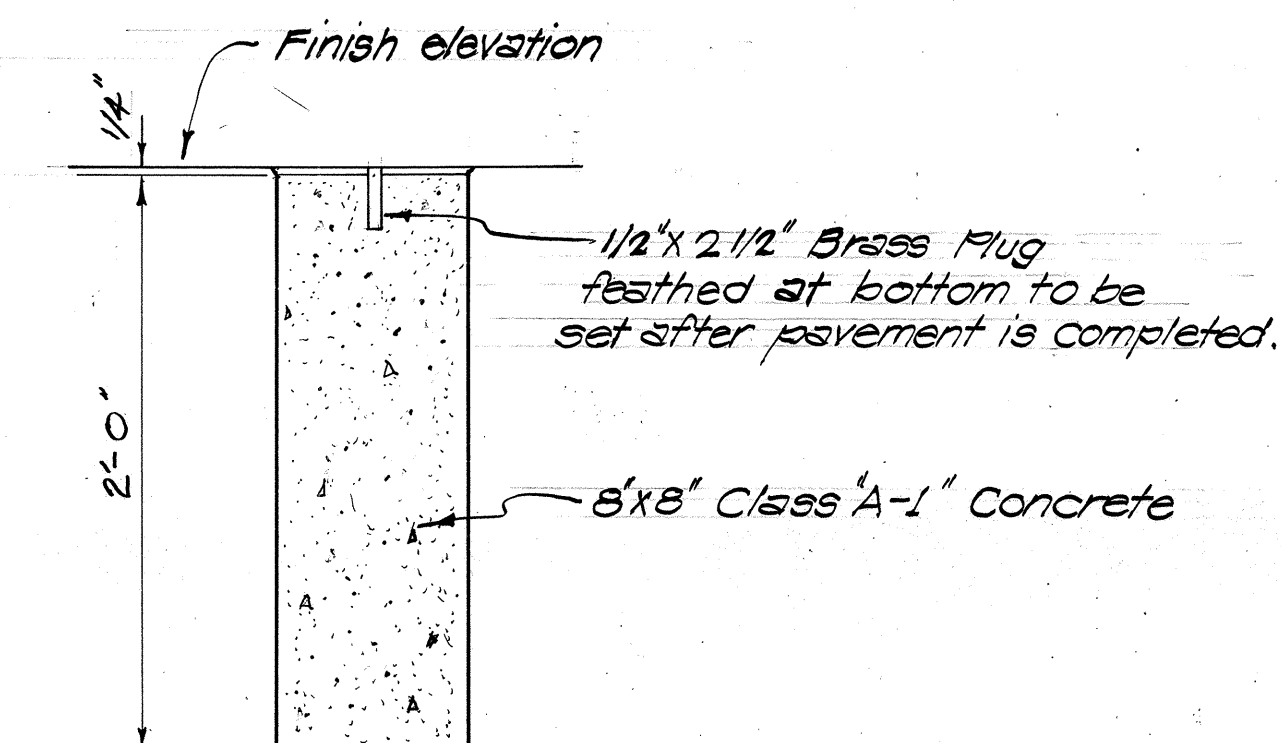
SCHEDULE

Following table gives offsets from Baseline parallel to Edge of Pavement at intervals measured from Point "A" add "E" for measurement from Edge of Pavement.

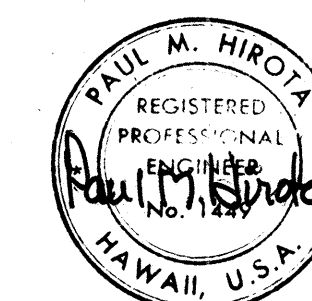
Offset from Baseline (feet)			Length of Taper (feet) *AD		
			240	270	300
DD'=12'	DD'=13'	DD'=14'	Distance from Point "A" (feet)		
0	0	0	0	0	0
0.19	0.20	0.22	20	22.5	25
0.75	0.81	0.88	40	45	50
1.69	1.83	1.97	60	67.5	75
*3.00	*3.25	*3.50	80	90	100
*6.00	*6.50	*7.00	120	135	150
*9.00	*9.75	*10.50	160	180	200
10.31	11.17	12.03	180	202.5	225
11.25	12.19	13.13	200	225	250
11.81	12.80	13.78	220	247.5	275
12.00	13.00	14.00	240	270	300

* Where edge of pavement is a curve, neither Baseline nor Taper between B' and C' will be tangent. Use proportional offset from B' to C'.

TAPER FOR SPEED-CHANGE LANES



DETAIL FOR SURVEY MONUMENT
Scale: 1/2" = 1'-0"



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HIGHWAYS DIVISION

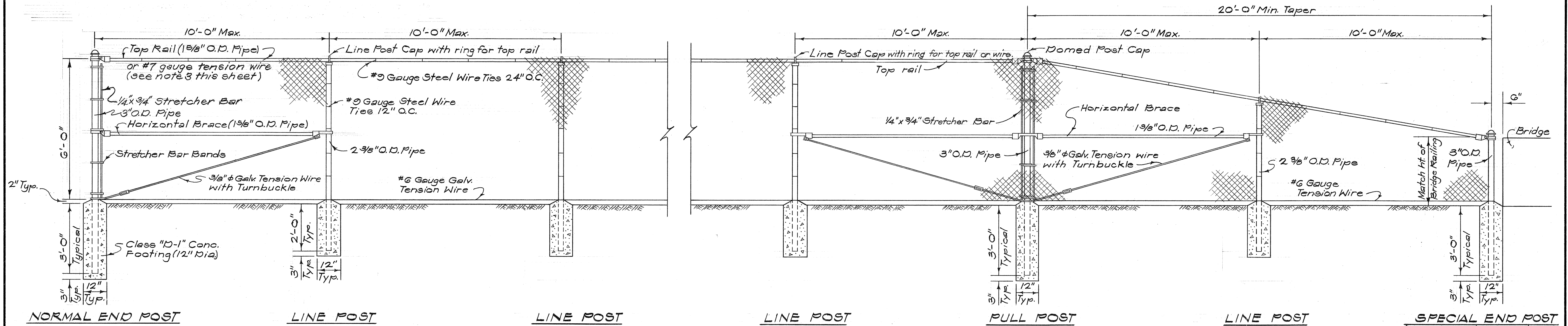
**PEARL CITY PENINSULA
DISPOSAL SITE**
8 MISC. ROADWAY DETAILS

INTERSTATE ROUTE H-1
PROJ. NO. I-HI-1(65)-10

Scale: As Noted Date: 7-24-69
SHEET No 3 OF 6 SHEETS

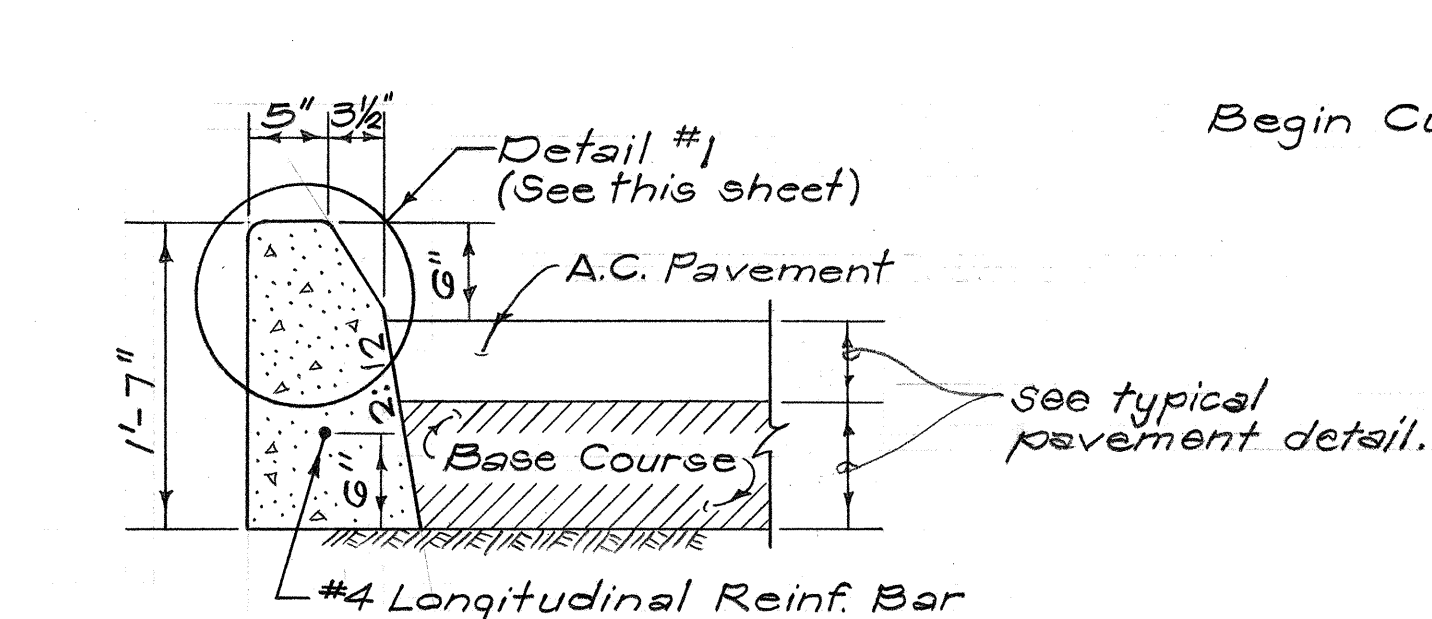
NOTES:

1. Special tapered fencing at bridge railing connections shall be measured and paid for as T2" chain link fence.
2. One each pad lock with 6 each keys shall be supplied by the State for each gate installed.
3. #7 gauge top tension wire shall be used in lieu of top rail post, or fencing at bridge approaches and where fencing is installed closer than 30 feet, horizontal, from edge of pavement of any roadway. Top rail post shall be used at all other areas. Exact limits shall be as directed by the Engineer.



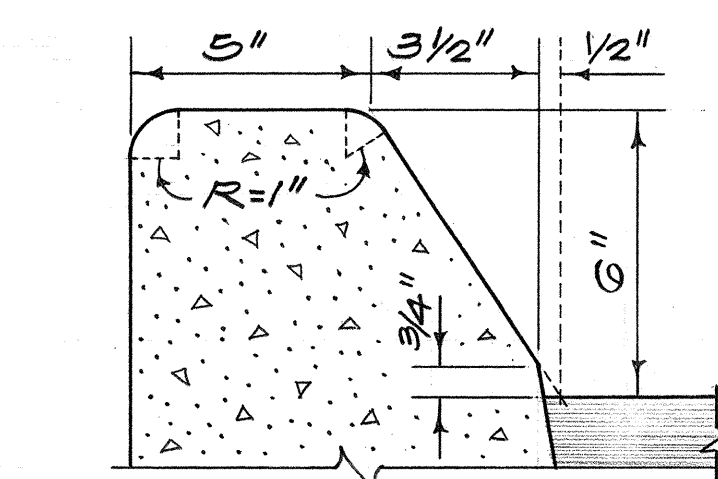
CHAIN LINK FENCE DETAILS

Scale: $\frac{1}{2}'' = 1'-0''$



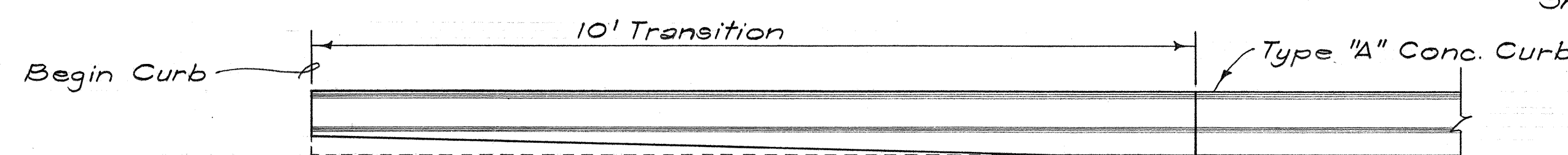
TYPE "A" CAST-IN-PLACE
CONC. CURB

Scale: 1" = 1'-0"

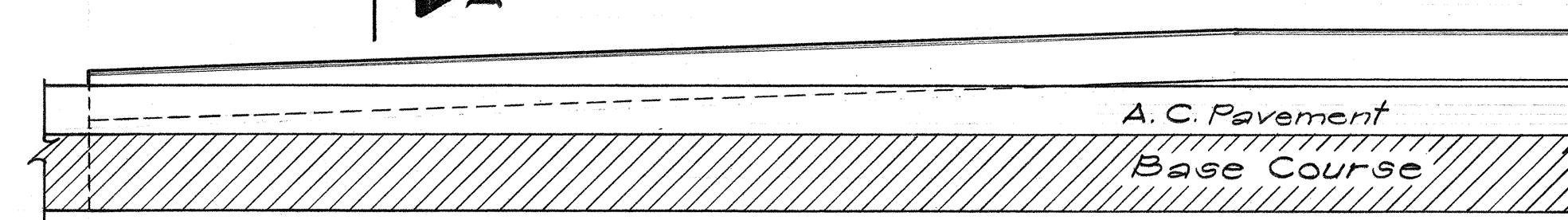


DETAIL NO. 1

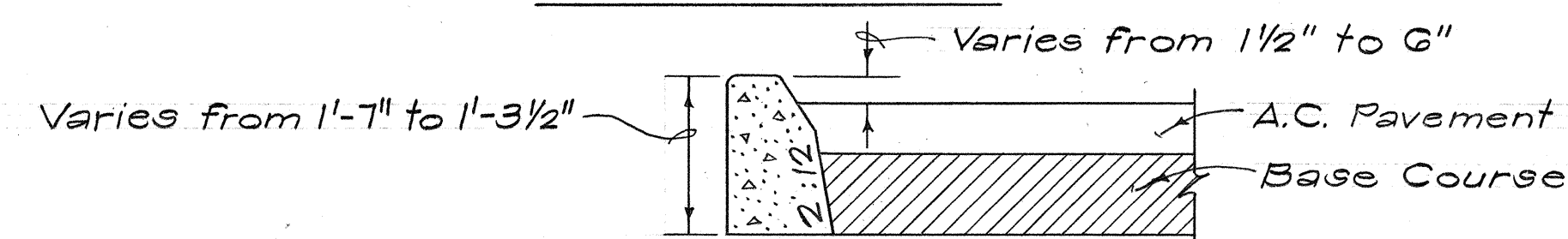
Scale: 3" = 1'-0"



PLAN



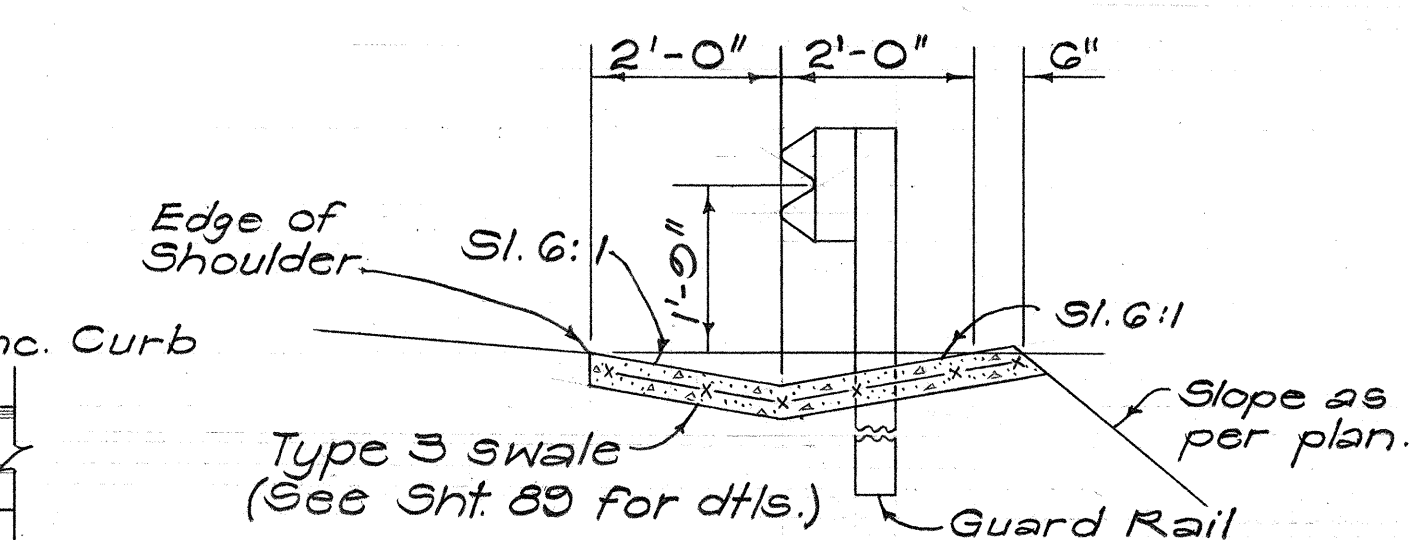
ELEVATION



SECTION "A-A"

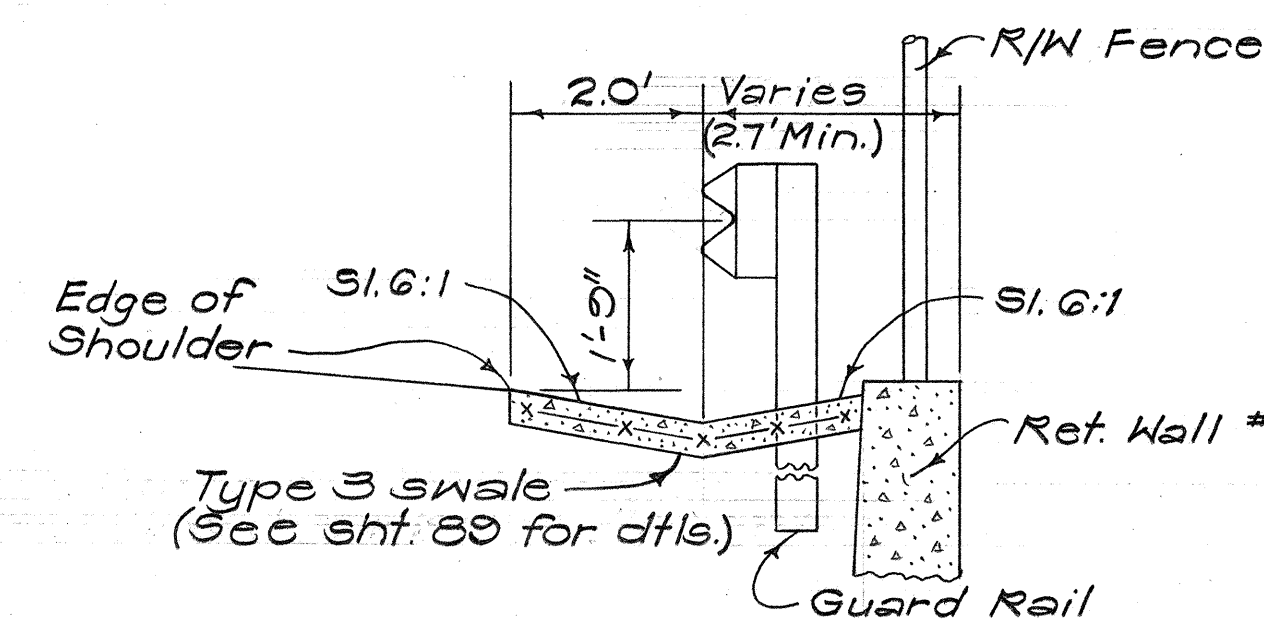
CURB TRANSITION DETAIL

Scale: $\frac{3}{4}" = 1' - 0"$



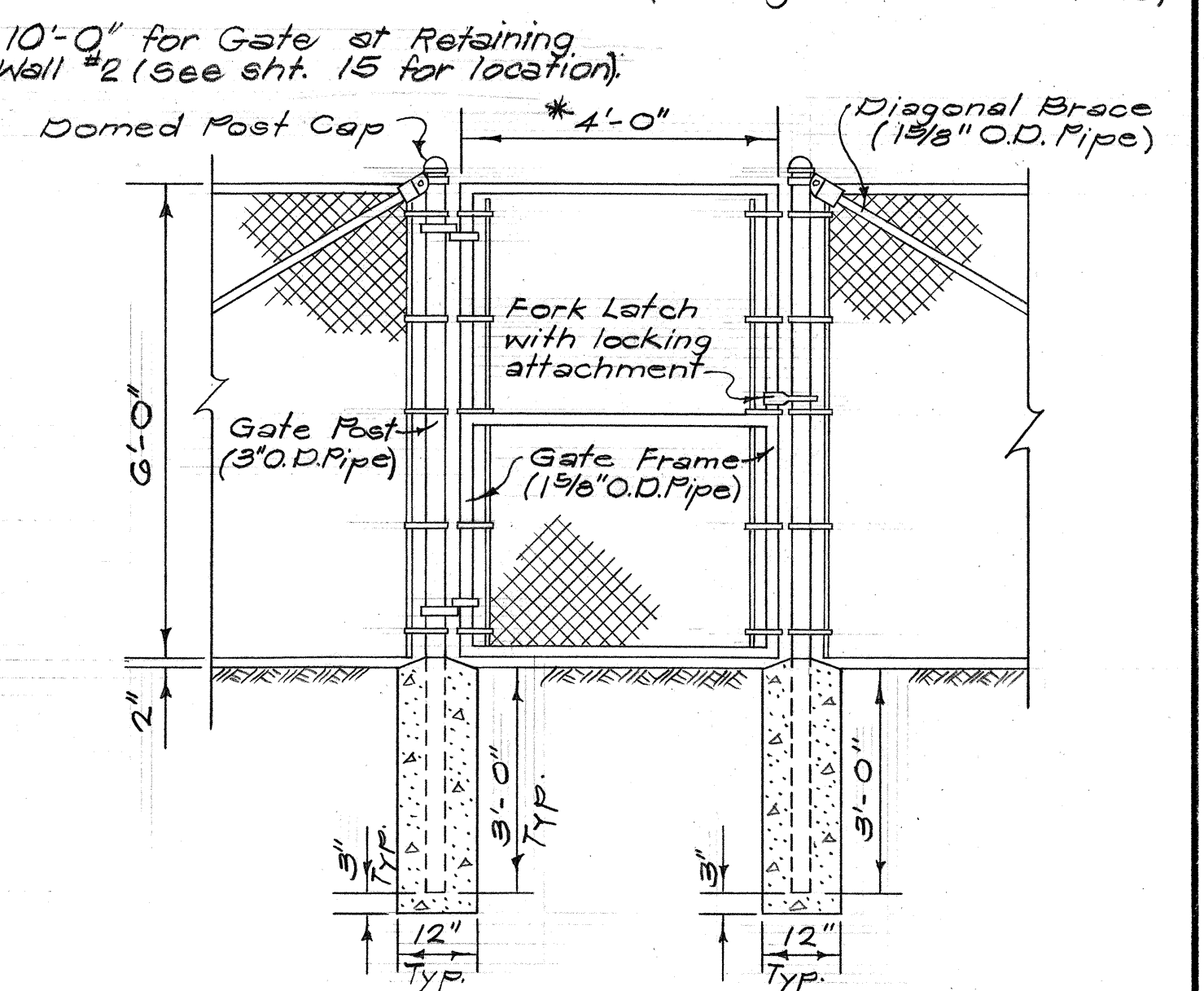
TYPICAL GUARD RAIL DETAIL
RAMP "C" STA. 12+37.12 TO
MOANALUA ROAD STA. 59+51.61

Scale: $\frac{1}{2}'' = 1'-0''$



GUARD RAIL DETAIL
MOANALUA ROAD

STA. 56+62± TO 57+45±
Scale: 1/2" = 1'-0"



GATE POST GATE POST
CHAIN LINK GATE DETAILS

Scale: $\frac{1}{2}'' = 1' - 0''$

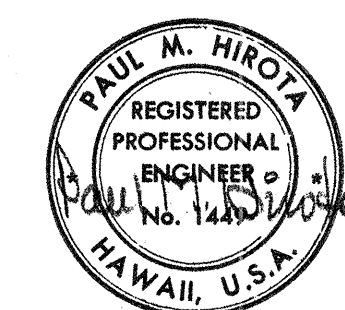
**STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION**

MISCELLANEOUS ROADWAY DETAILS

INTERSTATE ROUTE H-1
PROJ. NO. I-H-1-(65):10

Scale: As Shown Date: 4-24-09

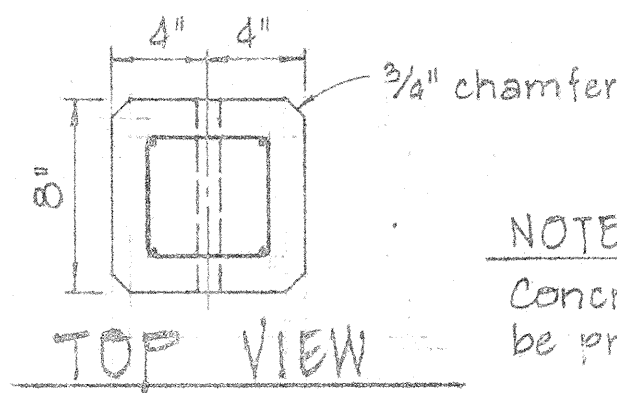
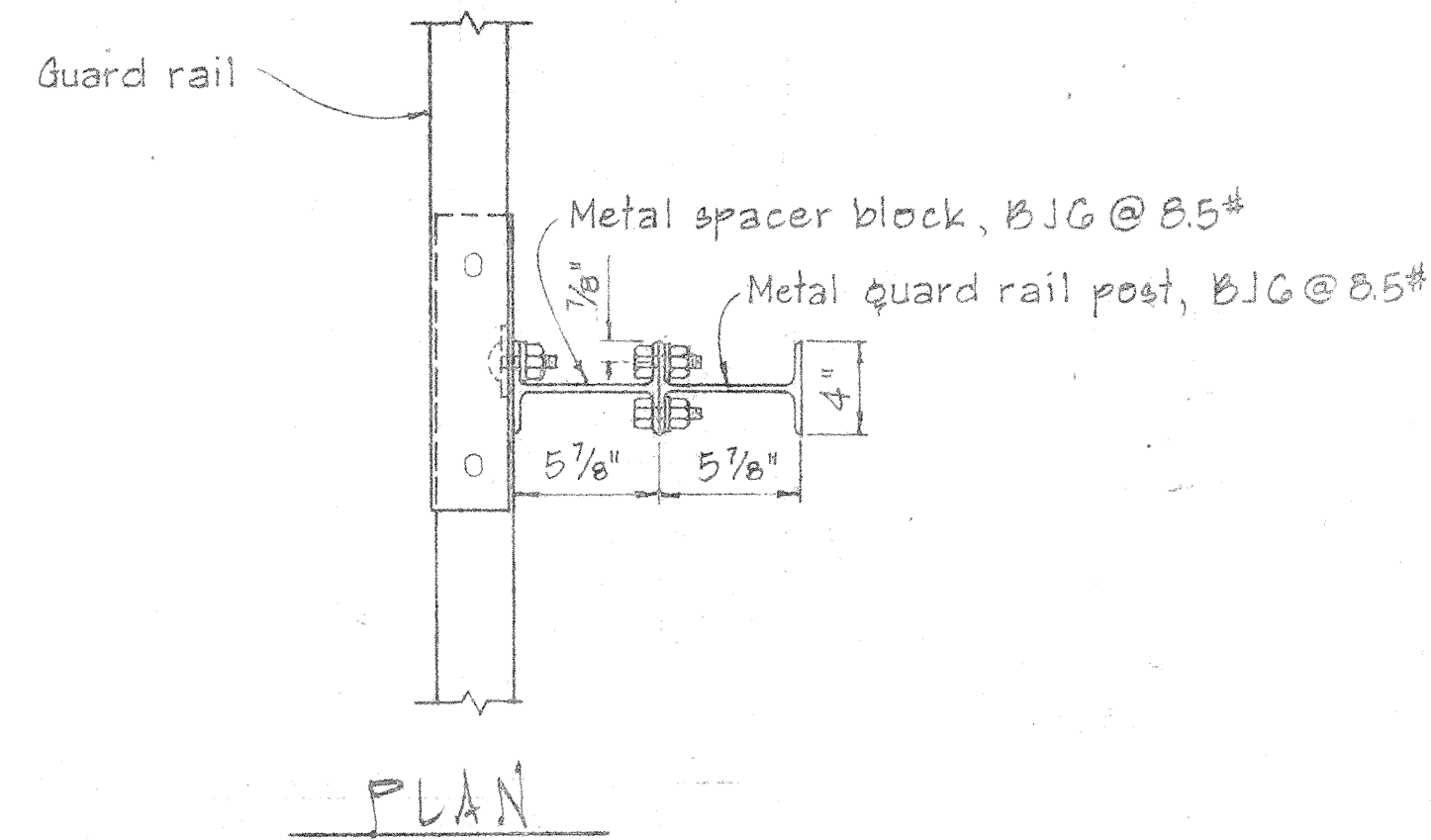
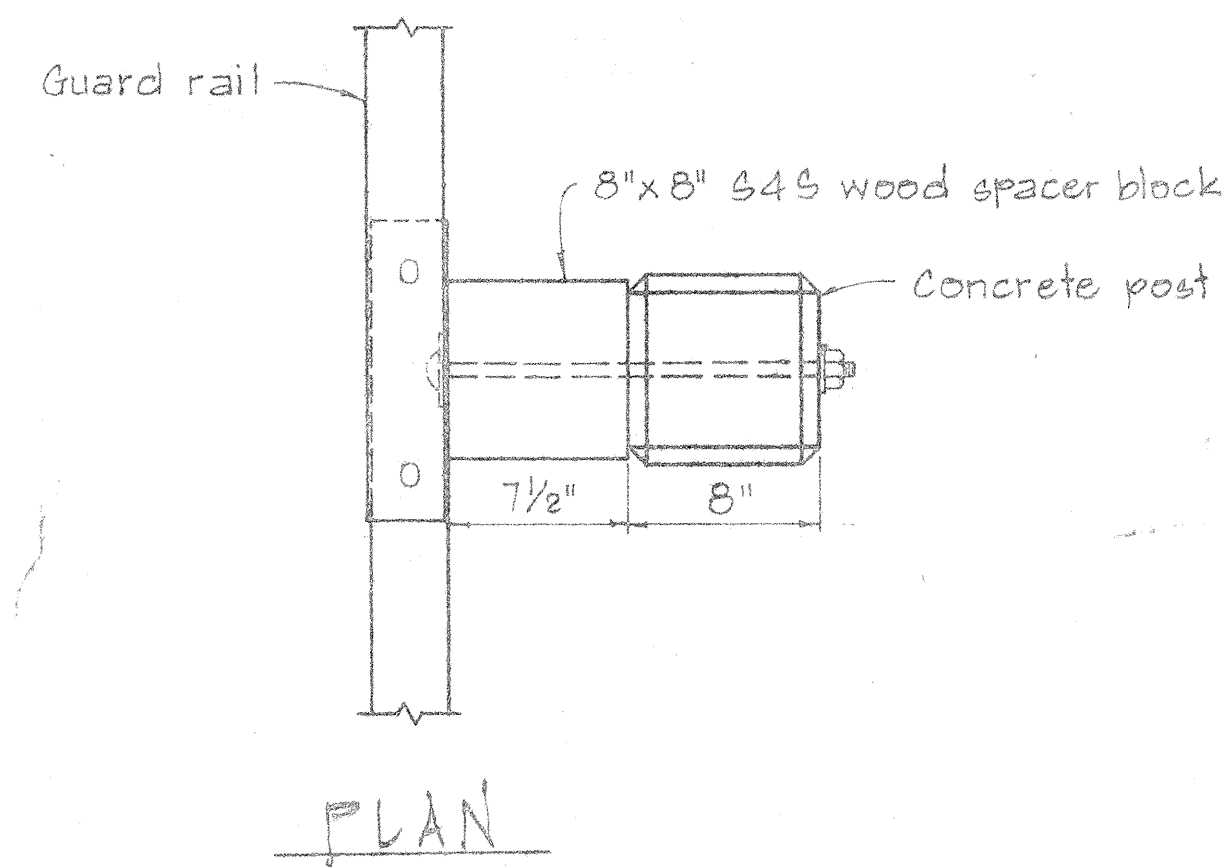
SHEET No. 4 OF 6 SHEETS



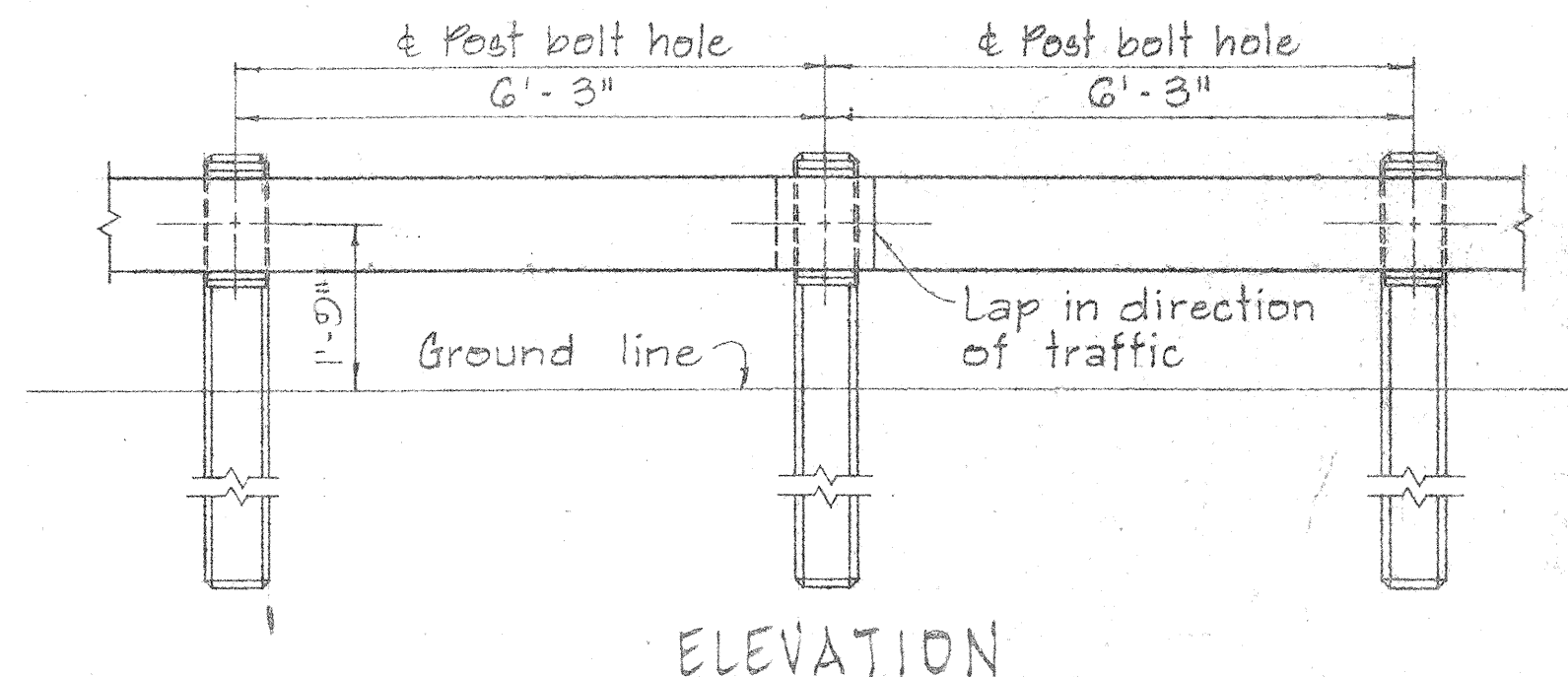
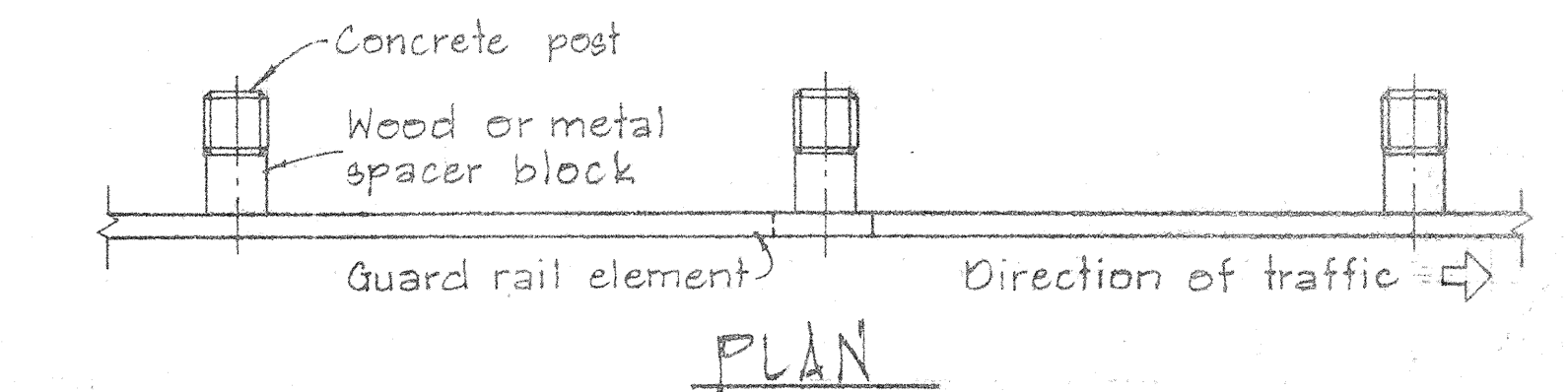
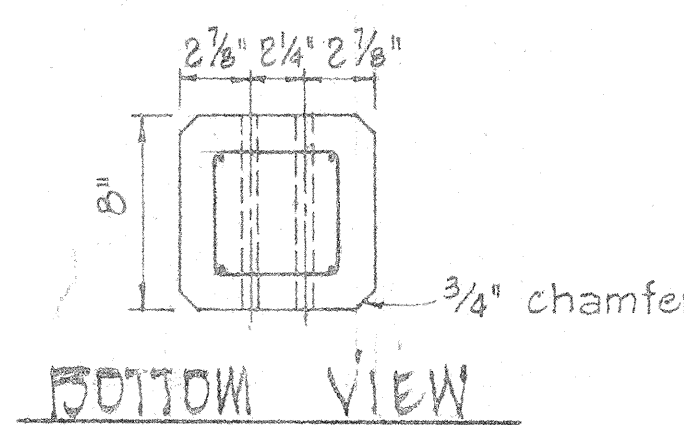
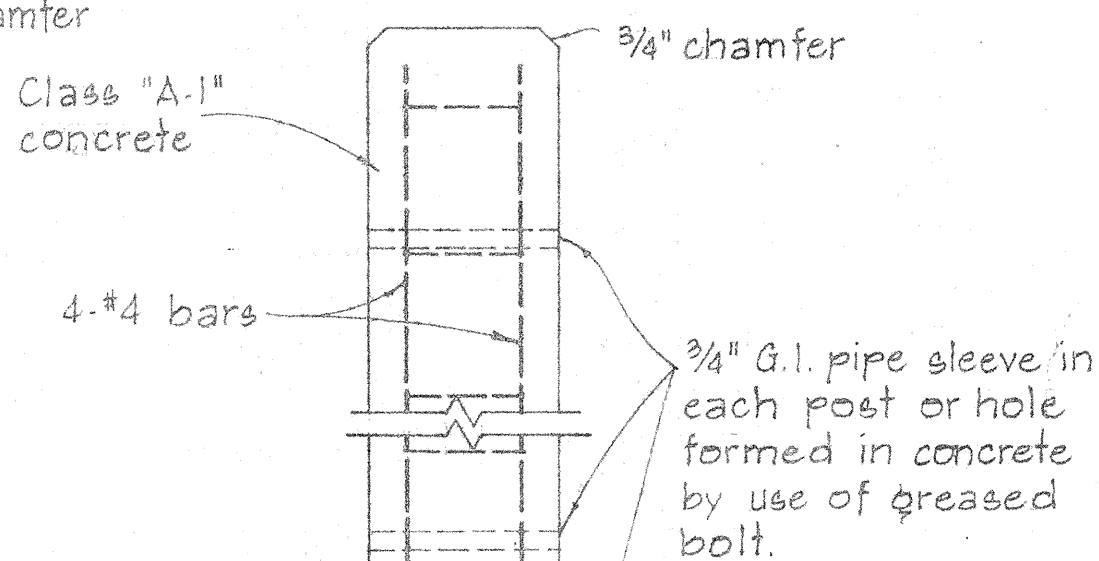
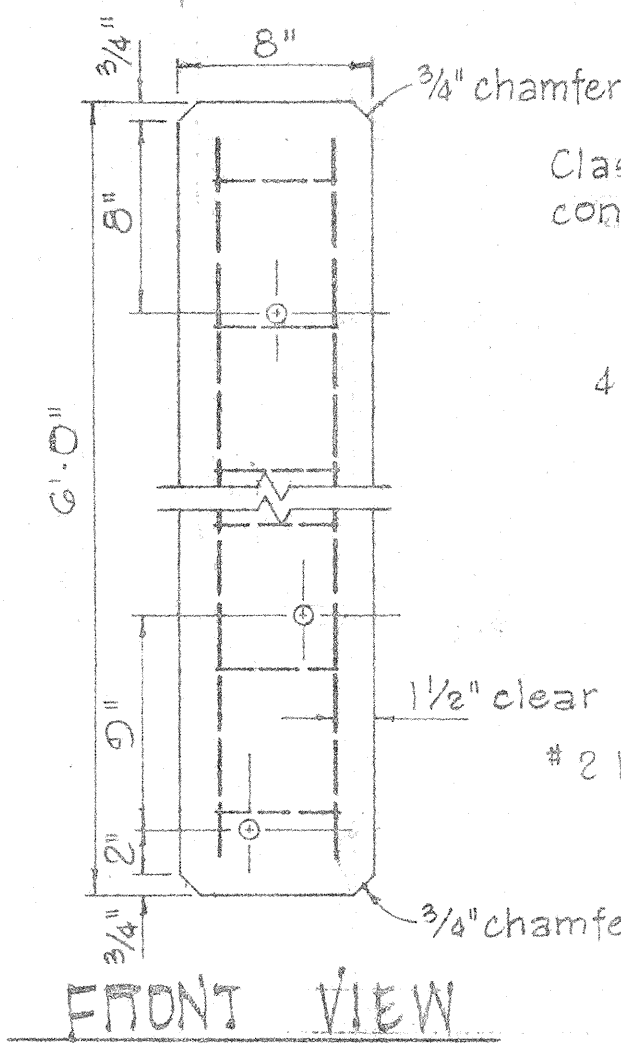
THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-(69):10 I-HI-(40):11	1969	57	185

REVISED: 12-11-68
REVISED: 2-26-69

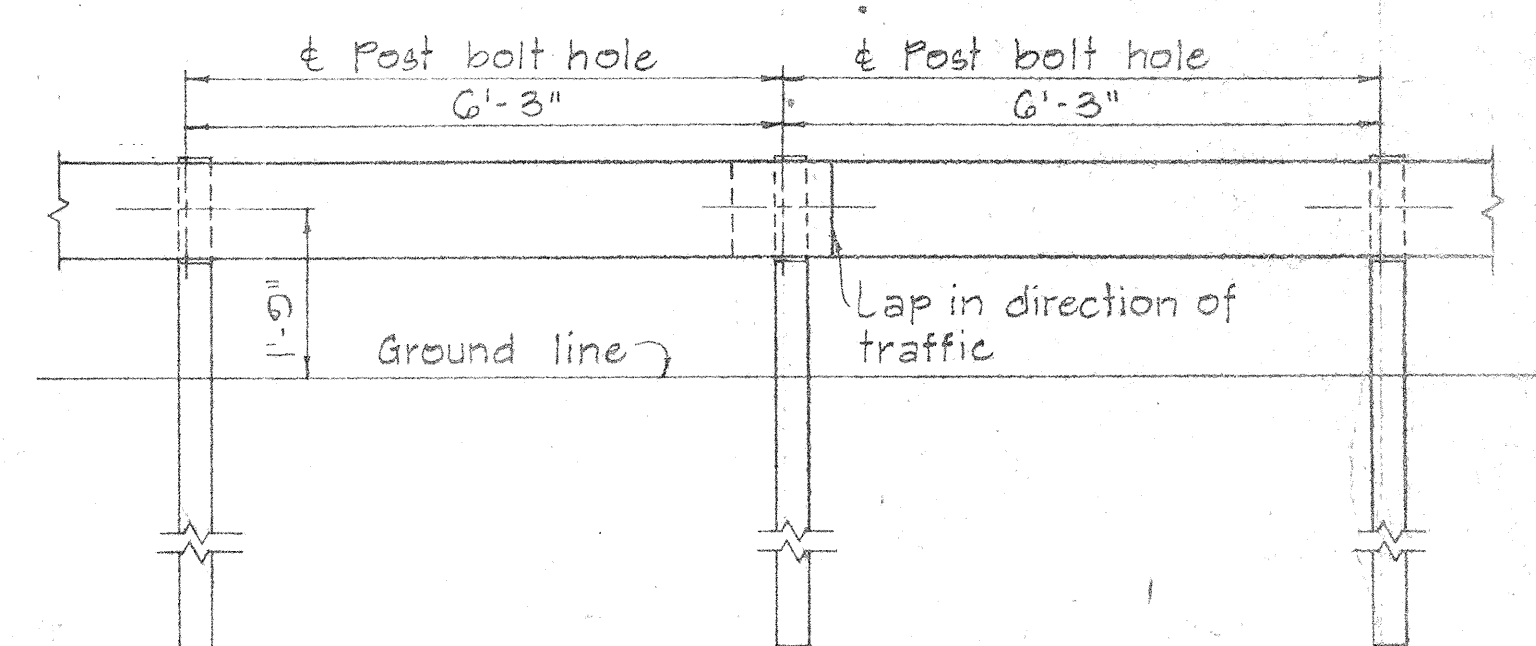
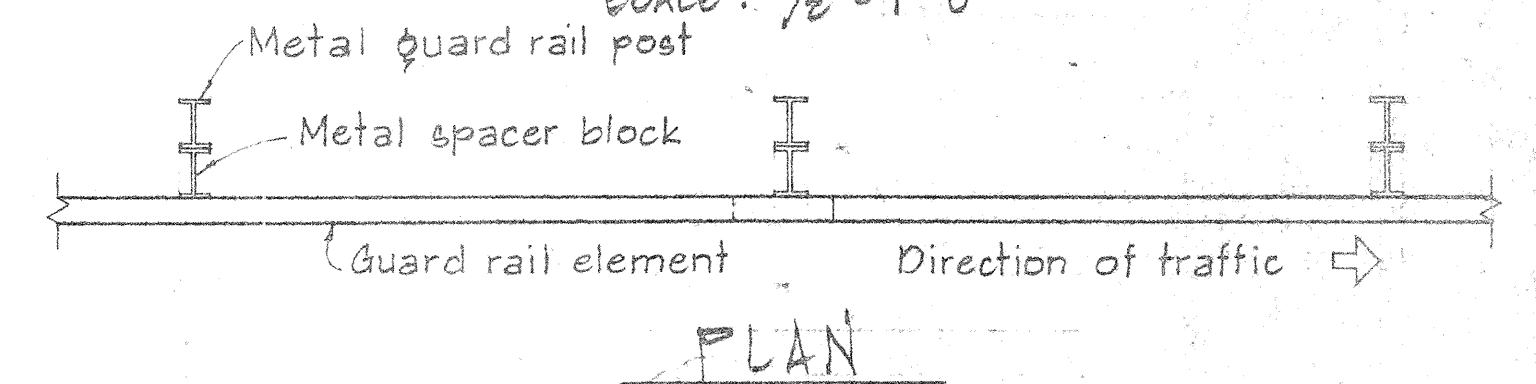


NOTE:
Concrete post shall be precast



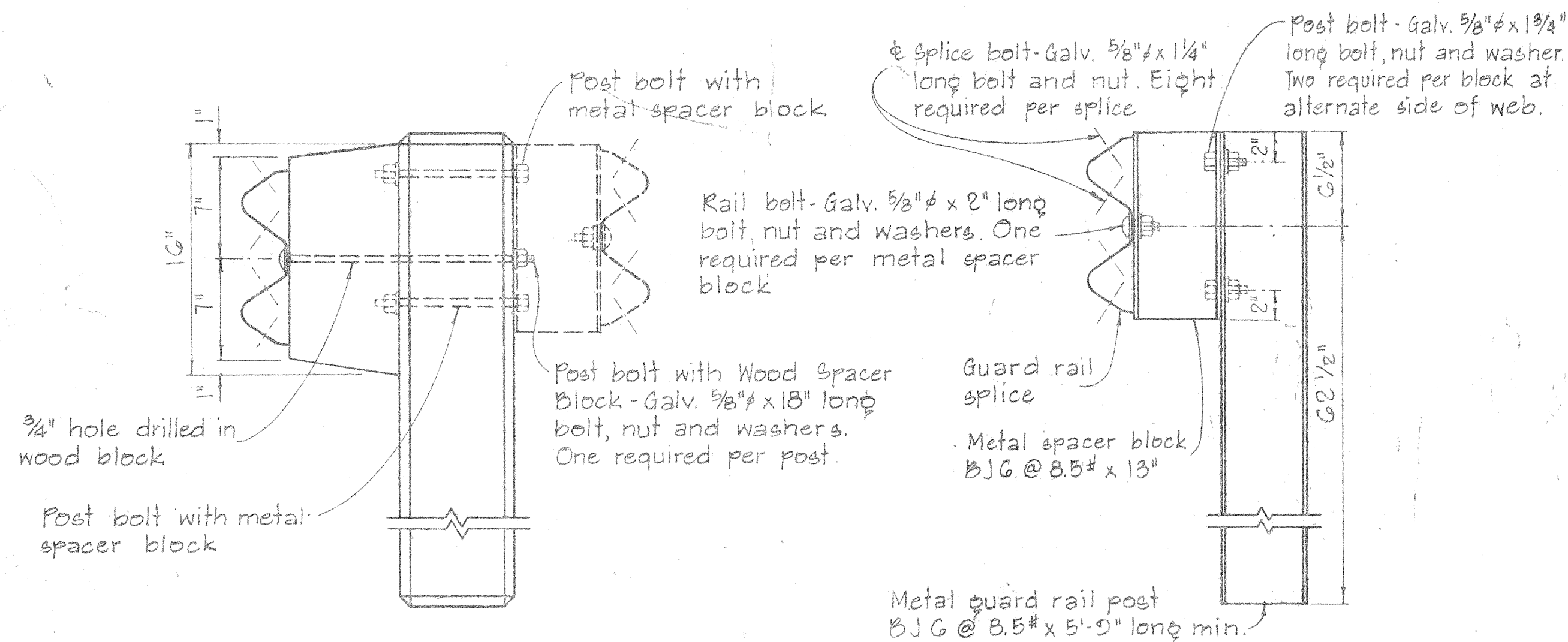
METAL GUARD RAIL ON CONCRETE POST
WITH WOOD OR METAL SPACER BLOCK

SCALE: 1/2" = 1'-0"



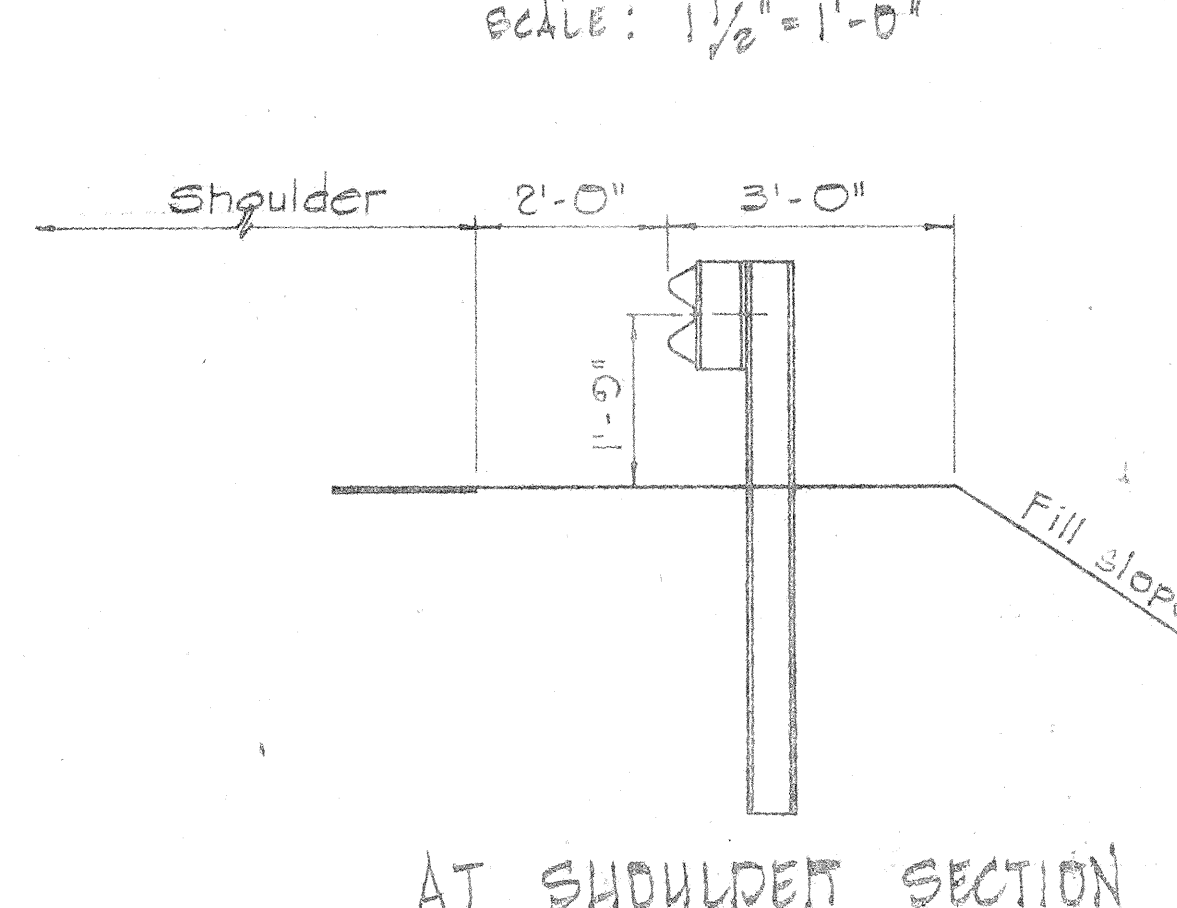
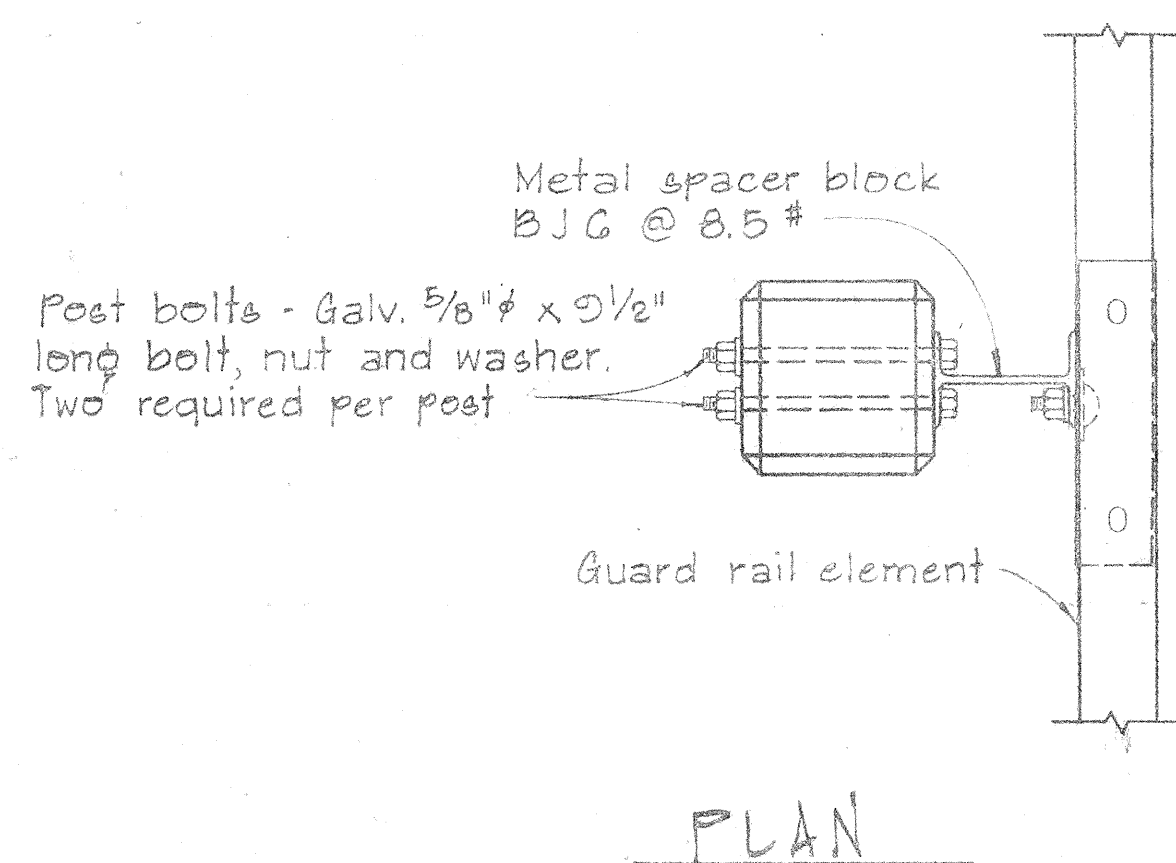
METAL GUARD RAIL ON METAL POST
WITH METAL SPACER BLOCK

SCALE: 1/2" = 1'-0"



SINGLE METAL GUARD RAIL ON METAL POST
WITH METAL SPACER BLOCK

SCALE: 1/2" = 1'-0"



SINGLE METAL GUARD RAIL ON PRECAST
CONCRETE POST WITH WOOD OR METAL SPACER BLOCK

SCALE: 1/2" = 1'-0"

TYPICAL METAL GUARD RAIL DETAIL

SCALE: 1/2" = 1'-0"

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
METAL GUARD RAIL

SCALE: AS SHOWN NOV. 1968
SHEET No. 5 OF 6 SHEETS DT 500

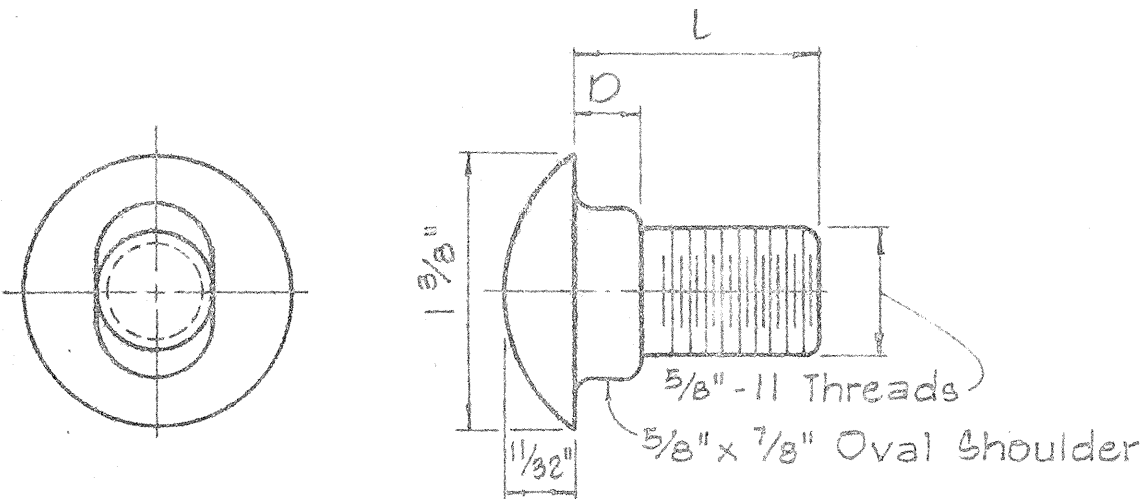
DATE	DESIGNED BY	CHECKED BY
NOV. 1968	NOV. 1968	NOV. 1968
ORIGINAL	NOTE BOOK	NO.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HI-1(60)10 HI-1(40)11	1969	58	185

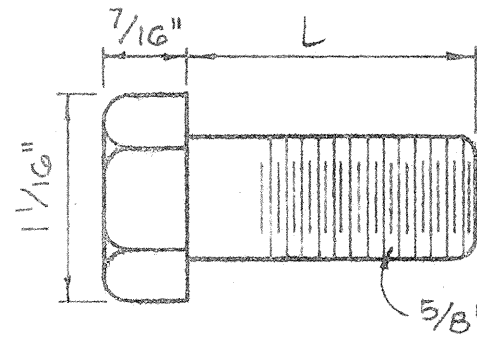
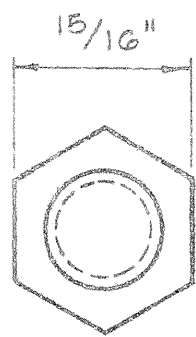
Revised: Dec. 11, 1968

BOLT DIMENSIONS		
TYPE A BOLT		
Splice Bolt	D 5/16"	L 1 1/4"
Post Bolt for Conc. Post w/ Double Wood Blocks	3/32"	24"
Post Bolt for Conc. Post w/ Single Wood Block	3/32"	18"
Rail Bolt for Metal Block	3/32"	2"

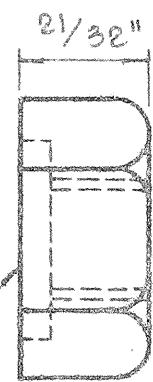
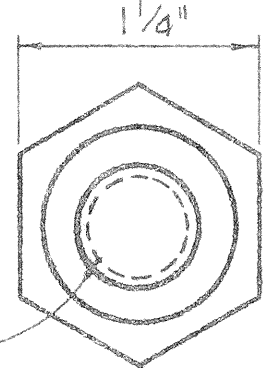
BOLT DIMENSIONS		
TYPE B BOLT		
Post Bolt for Conc. Post w/ Metal Blocks		D 1/2"
Post Bolt for Metal Post w/ Metal Block		L 3/4"



TYPE A BOLT



TYPE B BOLT



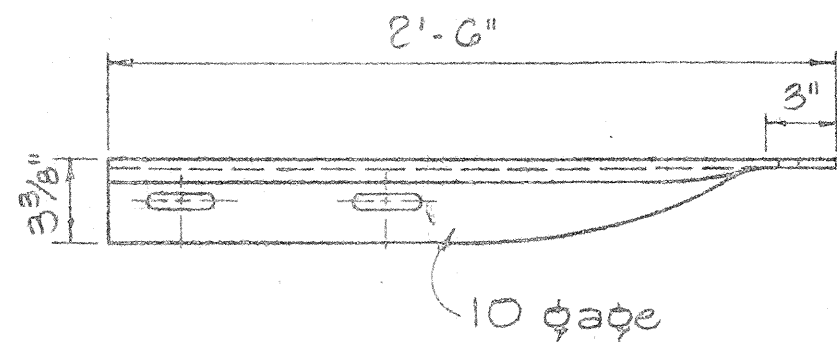
5/32" Deep x 15/16" Dia. C' Bore for Type A Bolt only. Plain nut for Type B Bolt.

SPlice RAIL AND POST BOLTS

Scale: Full Size

HEXAGON NUT

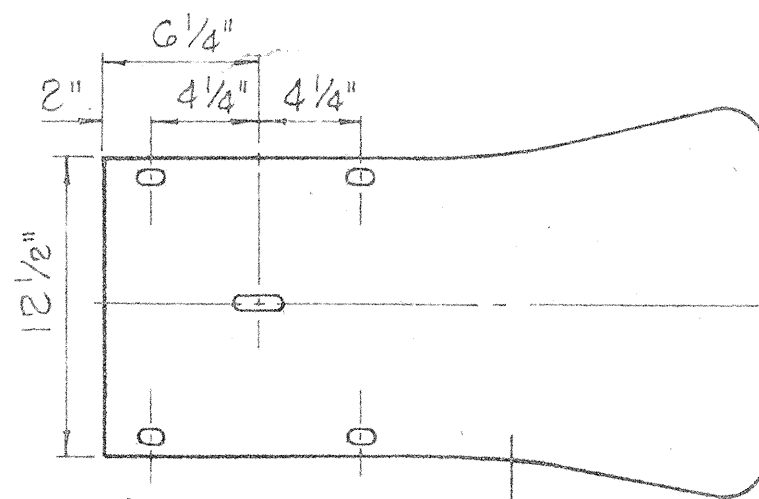
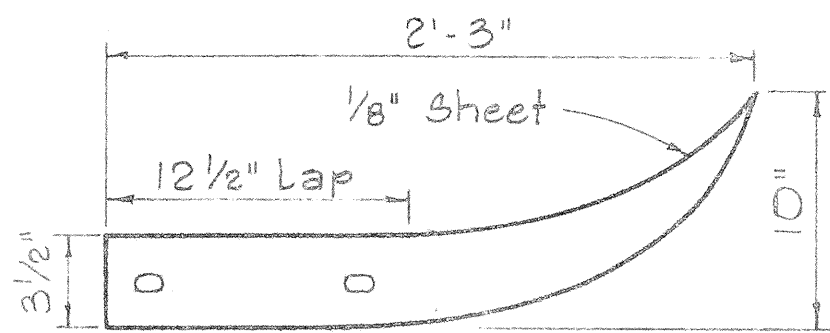
Scale: Full Size



3/4" x 2 1/2" Post bolt slot (bolt as required) 3" 4 1/4" 4 1/4" 4" 4" 2" 4-1" dia holes for 7/8" dia x 7 1/4" long H.G. Anchor bolts (length under head) H.G. nut and washer.

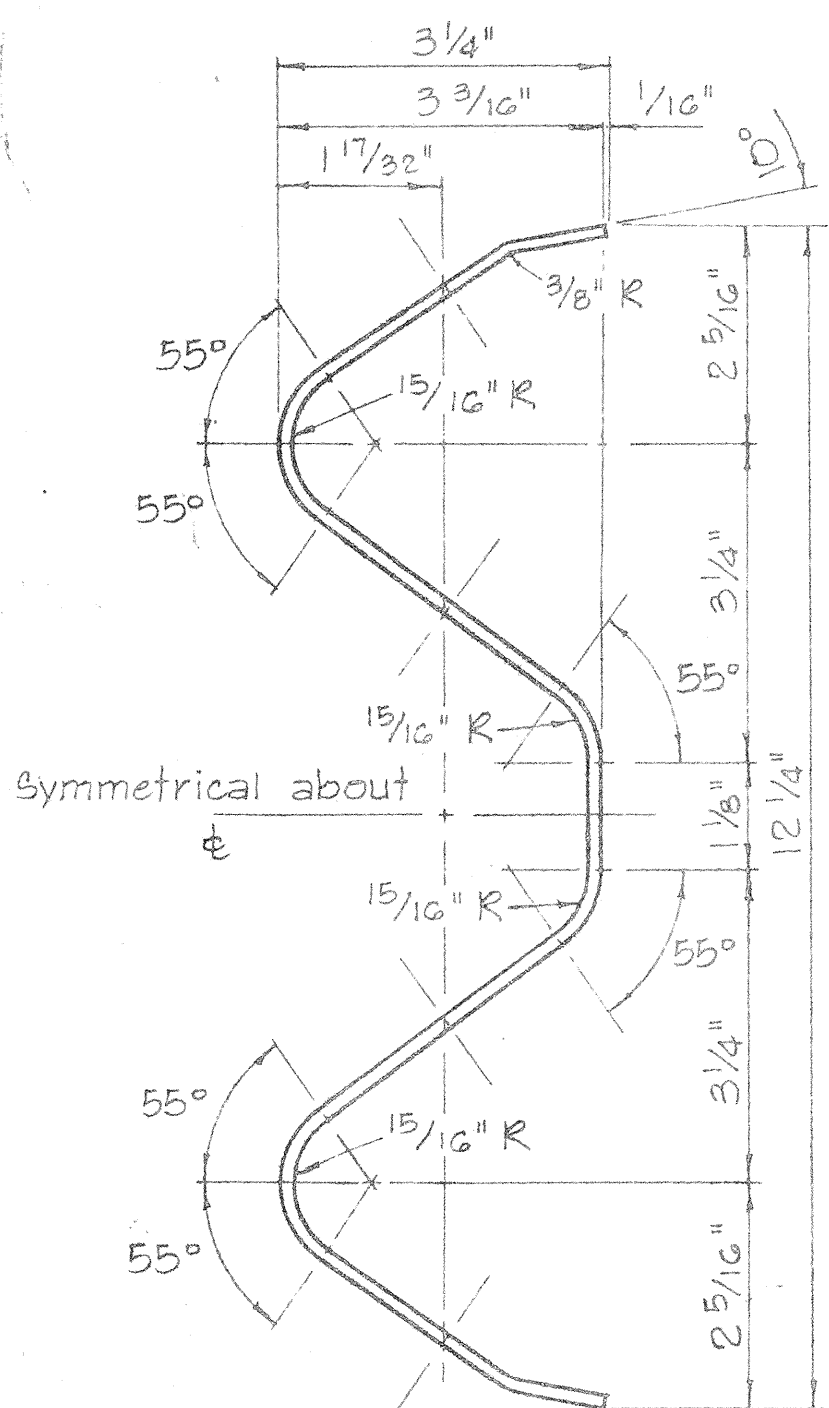
SPECIAL END SHOE

Scale: 1 1/2" = 1'-0"



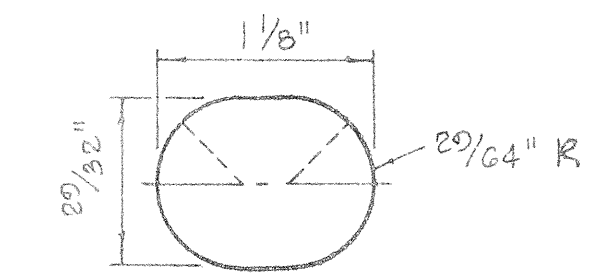
FLARED END

Scale: 1 1/2" = 1'-0"



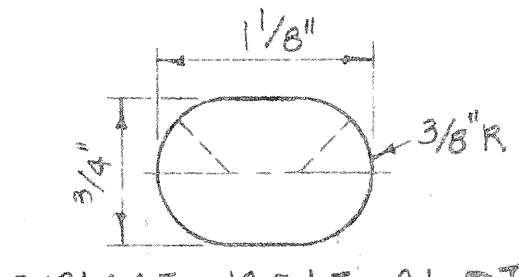
RAIL ELEMENT SECTION

Scale: 6" = 1'-0"

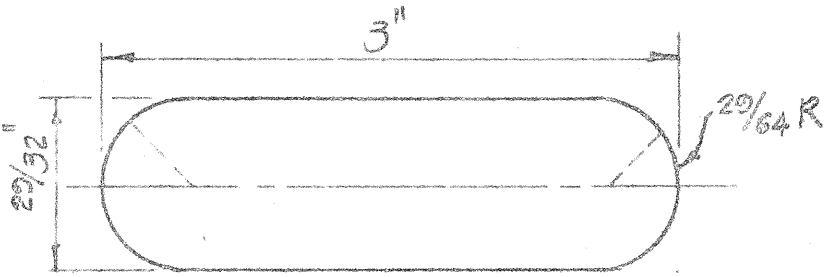


SPlice BOLT SLOT

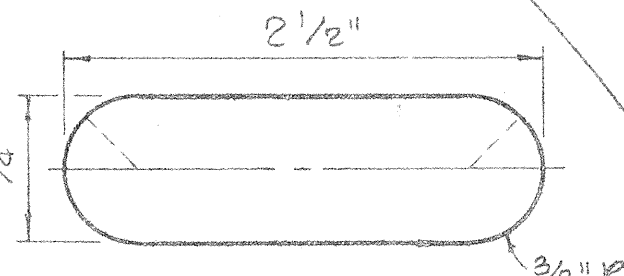
Scale: Full Size



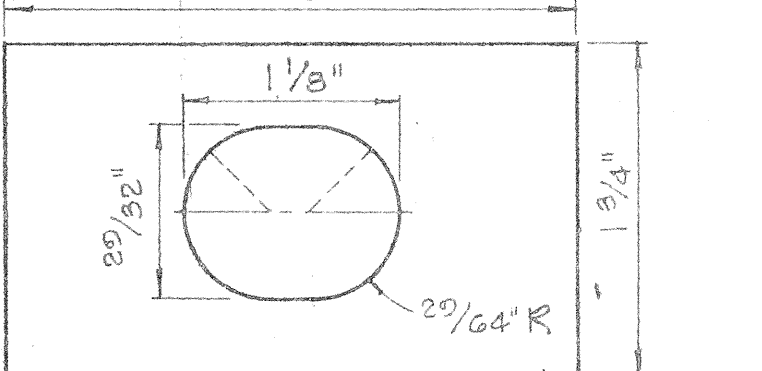
SPlice BOLT SLOT FOR ALL ENDS



SPlice BOLT SLOT FOR SPECIAL END SHOE



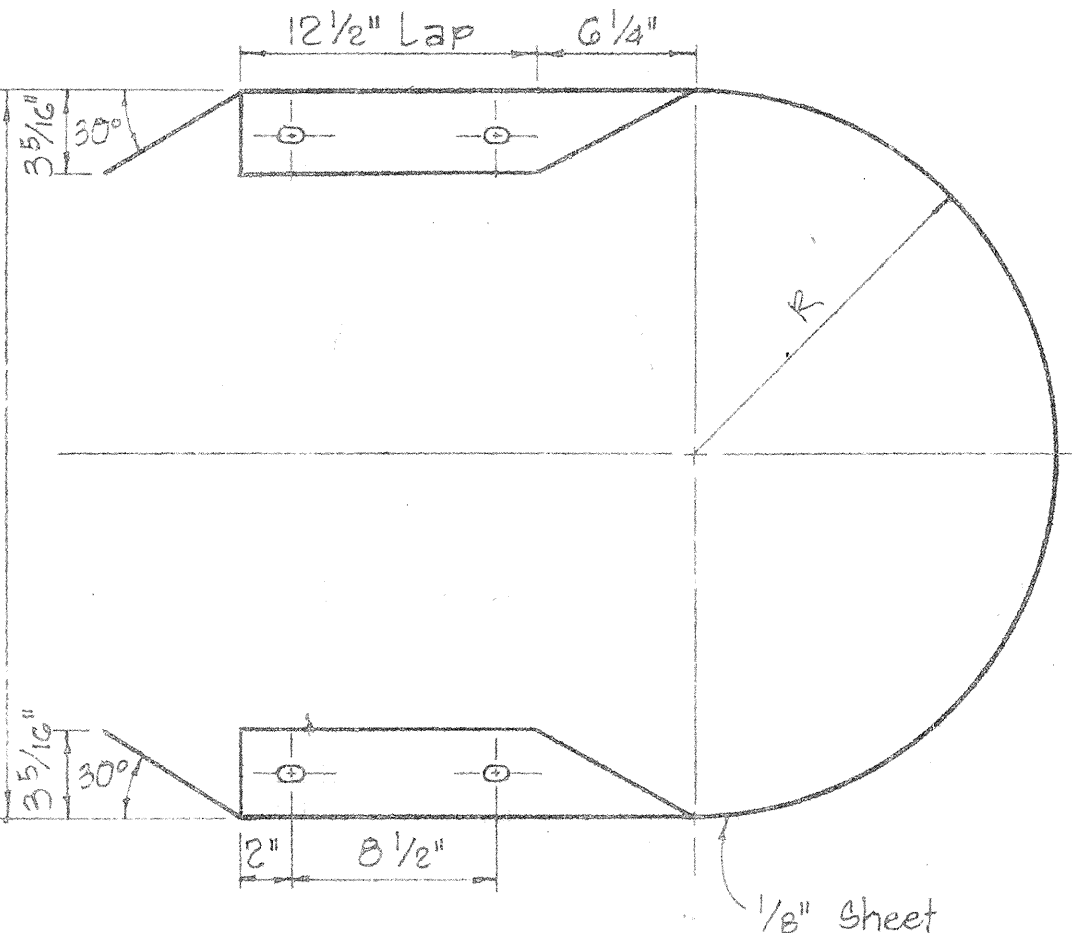
POST BOLT SLOT



RAIL WASHER

NOTES:

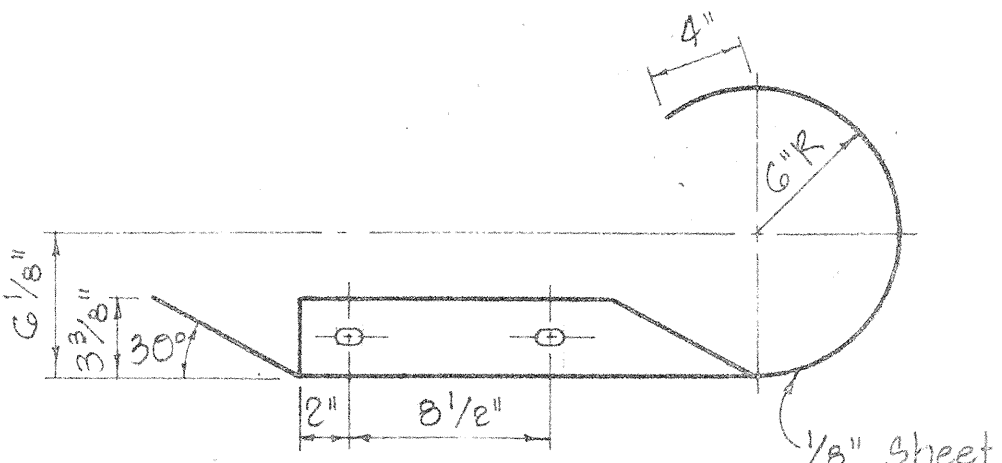
1. H.S. Bolts shall conform to the requirements of ASTM A-325.
2. Special End Shoe shall be fabricated from 10 Gage steel conforming to the requirements of AASHO 180.



MEDIAN END

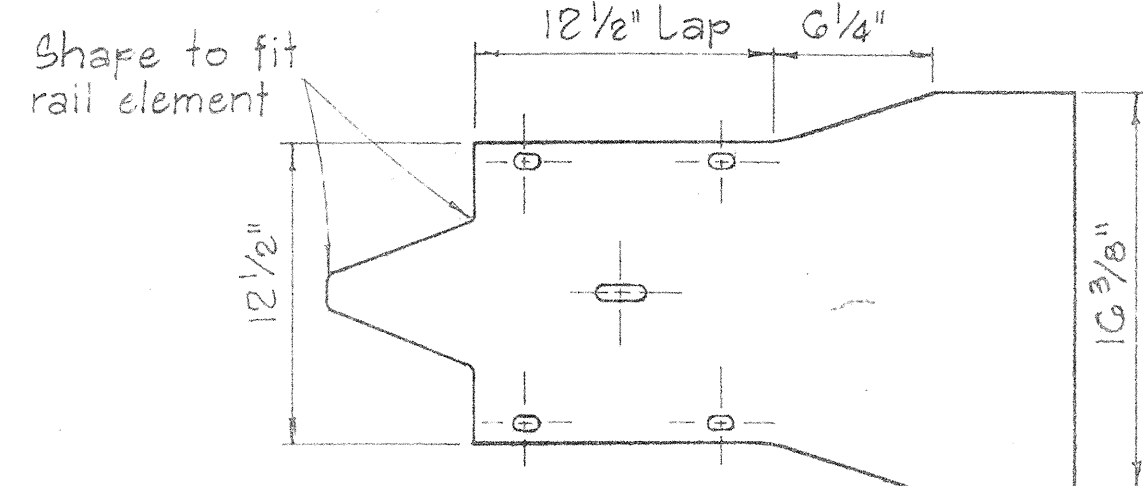
Scale: 1 1/2" = 1'-0"

MEDIAN END DIMENSIONS		
TYPE OF POST AND BLOCK	W	R
Double Metal Guard Rail on Concrete Post with Wood Blocks	29 3/4"	14 7/8"
Double Metal Guard Rail on Concrete Post with Metal Blocks (BJG)	26 1/2"	13 1/4"
Double Metal Guard Rail on Metal Post with Metal Blocks (BJG)	24 3/8"	12 3/16"



CURVED END

Scale: 1 1/2" = 1'-0"



STANDARD DETAILS
METAL GUARD RAIL

Scale: As Noted August, 1968

SHEET No. 6 OF 6 SHEETS DT 501

DATE	_____
DESIGNED BY	_____
DRAWN BY	_____
CHECKED BY	_____
APPROVED BY	_____
ORIGINAL PLAN	_____
NOTE BOOK	_____
NO.	_____